

RESEARCH ARTICLE

Opportunities for Organizing Distance Learning Presented by the Moodle Platform: Experience in the Conditions of the COVID-19 Pandemic

Oportunidades para organizar el aprendizaje a distancia que presenta la plataforma Moodle: experiencia en las condiciones de la pandemia COVID-19

Natalia Vladimirovna Grigoryeva

Financial University under the Government of the Russian Federation, Moscow, Russia
<https://orcid.org/0000-000-4813-7802>

Ibragim Mustafaevich Melikov

Russian State Social University, Moscow, Russia
<https://orcid.org/0000-0003-2092-5134>

Nadezhda Valerevna Palanchuk

K.G. Razumovsky Moscow State University of Technologies and Management (the First Cossack University), Moscow, Russia
<https://orcid.org/0000-0003-0102-3565>

Indira Irekovna Kokhanovskaya

Military University of the Ministry of Defense of the Russian Federation, Moscow, Russia
<https://orcid.org/0000-0002-1711-5985>

Elena Aralova

K.G. Razumovsky Moscow State University of Technologies and Management (the First Cossack University), Moscow, Russia
<https://orcid.org/0000-0001-7835-8756>

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***Correspondencia**

Email: navlagri@mail.ru

Summary

The implementation of modern information technologies in education presents a promising direction of the pedagogical science since it makes it possible to provide educational services through a specialized information educational environment – a combination of information resources, technical devices, and telecommunication channels enabling the exchange of educational information at a distance. The goal of the present study is to analyze and identify the opportunities of the Moodle platform in education as a whole and in studying English at a university in particular. The methodological basis of the study is formed by the analysis of the experience of teachers of the Department of English Language, the methods of teaching English, and a survey of experts in the area. Using the Moodle platform in the process of teaching future English teachers allows both teachers and students to easily exchange files, carry out personal communication, and receive feedback. The presented electronic course allows teachers to create their own e-learning courses in foreign languages.

Keywords: E-Learning Course, Future English Teachers, Blended Learning, Information Environment.

Resumen

La implementación de tecnologías modernas de la información en la educación presenta una dirección prometedora de la ciencia pedagógica, ya que permite probar los servicios educativos a través de un entorno educativo de información especializado: una combinación de recursos de información, dispositivos técnicos y canales de telecomunicaciones que permiten el intercambio de información educativa. A una distancia. El objetivo del presente estudio es analizar e identificar las oportunidades de la plataforma Moodle en la educación en su conjunto y en el estudio de inglés en una universidad en particular. La base metodológica del estudio está formada por el análisis de la experiencia de los profesores del Departamento de Lengua Inglesa, los métodos de enseñanza del inglés y una encuesta a expertos en el área. El uso de la plataforma Moodle en el proceso de enseñanza de los futuros profesores de inglés permite tanto a los profesores como a los estudiantes intercambiar archivos fácilmente, realizar comunicaciones personales y recibir comentarios. El curso electrónico presentado permite a los profesores crear sus propios cursos de e-learning en idiomas extranjeros.

Palabras clave: curso de e-learning, futuros profesores de inglés, blended learning, entorno de información.

Introduction

Present approach aims at the implementation of distance learning (DL) (particularly in the institutions of higher education) which implies learning with the use of computer and telecommunication technologies ensuring interactive communication between a teacher and students at different stages of learning, as well as independent work with the materials of the information network (Galizina et al., 2020; Skripak et al., 2020; Kartseva, Tavberidza, 2020; Alexander, 2006; Pavel et al., 2015; Judrups, 2015; Keengwe, Georgina, 2012).

DL presents a special pedagogical technology in the organization of the educational space characterized by the use of specific strategies and tactics of a student's interaction with the carriers and sources of new knowledge (Simonson et al., 2011; Damian, 2009). The introduction of DL technologies – tele-technologies (broadcasting lectures and seminars), case technologies (creating electronic teaching aids), Internet technologies (using a computer network to provide students with educational and methodological materials and facilitate interactive communication between a teacher and students) – provides the opportunity to create a virtual educational environment for the organization of students' independent work (Mahle, 2011; Wahlstedt et al., 2008; Park, 2014).

Such a virtual environment provides online access to educational/learning resources, allows electronic registration of students, and makes it possible to forward the results of learning to a teacher, carry out individual and group communication between a teacher and students, conduct current and final control and assessment, and so on (Oproiu, 2015; Sanchez, Hueros, 2010).

The implementation of DL technologies in the educational process is enabled by learning management systems (LMS) the most common of which is the technological platform Moodle (Shen, Huang: 2006; Beatty, Ulasewicz: 2006; Shan: 2012; Wood: 2010) which presents free software providing remote support of the learning process (Pivneva et al.: 2020; Golubeva et al.: 2020).

Overall, a DL platform presents software that supports DL. It is aimed at the creation and management of pedagogical content, individualized learning, and teletutoring and includes the means necessary for its three main users – the teacher, the student, and the administrator (Mateia, Vrabie, 2013).

A DL platform allows a teacher to create a learning course using multimedia pedagogical resources, individualize is following the needs and abilities of each student, and support students' activity. A student learns in the network or downloads the pedagogical meaning recommended to them, organizes their work, completes tasks. They are able to see their activity evolve, complete self-assessment tasks, and hand the completed assignments over to their teacher to review. Teachers and students communicate individually or in a group, propose topics for discussion, and cooperate in studying or creating shared documents. An administrator provides system maintenance, manages the access and rights of teachers and students, and creates connections with external information systems (administrative documents, catalogs, pedagogical resources, etc.) (Moreno et al., 2017; Benta et al., 2014; Martynova et al., 2020).

The choice of a DL platform has to be well-calculated and various characteristics, for instance, pedagogical, technical, economical, and organizational, must be considered. Moreover, the expectations of the platform from an administrative viewpoint (managing groups, individuals, and activity) and from the point of content (whether the creation of specific content is available or already existing products are included) should also be thought-out (Cavus, Momani, 2009; Zanjani et al., 2016; Dagger et al., 2007).

The goal of the article is to analyze and identify the opportunities of using the Moodle platform in education in general and in studying English in particular in pedagogical institutions of higher education, as well as to determine the advantages, disadvantages, and perspectives of using the platform in the educational process.

The study objectives include:

- examining the experience of organizing an educational course on the Moodle platform on the example of an e-learning course “Practical course of English”;
- establishing and describing the opportunities presented by the Moodle platform, its structural components, the content of standard educational modules of e-learning course modules in Moodle, the functions of an e-learning course, and the advantages and disadvantages of using the Moodle platform in the system of training future English teachers.

The hypothesis of the study states that the method of organizing DL of future English teachers via the means of the Moodle platform facilitates the development of their English-speaking competence.

The results of the conducted study allow us to conclude that the set goal has been achieved.

Methods

The founding theoretical provision of creating an e-learning course on the Moodle platform is presented by the idea that, among other things, the virtual learning environment created on the Moodle platform presents an LMS and allows one to create e-learning courses in the conditions of the COVID-19 pandemic.

An e-learning course created in the Moodle LMS presents a part of the educational space in the Moodle LMS that contains systematized material on a certain academic discipline. It also functions as an electronic learning environment understood as a set of conditions (pedagogical, organizational, information and methodical, material, and technical) facilitating the independent active goal-oriented activity of students under a teacher's supervision with the goal of developing their professional English-speaking competence.

The methodological basis of the study is formed by the analysis of the experience of teachers of the Department of English Language, the methods of teaching English, and a survey of experts in the area.

The analysis of the experience of teachers of the Department of English Language and the methods of teaching English included the analysis of the organization of the e-learning course "Practical course of English" based on the Moodle platform.

The expert survey was conducted in the form of a semi-formalized questionnaire composing questions on the opportunities presented by the Moodle platform, the structural components of the platform, the content of standard educational modules of e-learning course modules in Moodle, the functions of an e-learning course, and the advantages and disadvantages of using the Moodle platform in the system of training future English teachers.

The survey was conducted in the Russian language on August 27 and 28, 2020. The survey sample included experts in the field of DL, teachers, employees of foreign language departments of Russian pedagogical universities (40 people). The experts were selected based on the professional status of an expert; therefore, the sample of experts included specialists whose professional activities had been associated with working on the Moodle platform for more than 5 years.

The experts were notified about the goals of the survey and the fact that the results of the study were going to be published in a generalized form.

Results

In the present article, we examine the experience of teachers of the Department of English in organizing an e-learning course on the Moodle platform and the methods of teaching English in the conditions of the COVID-19 pandemic on the example of an e-learning course "Practical course of English". The examined course is aimed at helping full-time and part-time students of the specialties "Secondary Education (Language and Literature (English))" and "Philology" master the main material when studying the course. The course contains educational and methodical material for students' independent work that focuses on the development of their communication skills in social and professional communication.

The "Practical course of English" comprises the following primary sections filled with relevant educational, methodical, illustrative, and practice material: The program of the discipline; Timetable and practice tasks; Laboratory work assignments; Home reading assignments; Basic textbook; Module exam assignments; Final exam assignments; Individual research assignment; Tests; Electronic journal.

Future English teachers' remote work on the Moodle platform course consists of several stages:

- familiarizing with the general rules of using and visiting the site (the instruction, accessing the platform, creating a personal account, consulting the course program, timetable, and structure) personally or during the briefing conducted by the teacher during a lesson;
- receiving assignments for independent work or work during English classes;
- students' work on performing the independent tasks (the DL course contains various types of tasks; the tasks with a definite programmable answer are checked and marked by the system);
- discussion and evaluation of the results of students' work.

Answers to the tasks requiring creativity and expressing one's thoughts are sent to the teacher's corporate email. All the grades given by the teacher can be viewed by each student in the "Electronic Journal" section.

When teaching, the teacher provides partnership assistance by consulting students on the technical difficulties they face. At the same time, the teacher motivates students by drawing their attention to the fact that most tasks are automatically graded in the virtual learning environment with the answers to "assignments" being graded on a 100-point scale and "test" answers being graded on a 5-point scale.

Marks for every assignment and the final course grade are automatically calculated for every student in accordance with the number of correct answers in all completed activities.

A survey of students using the Moodle platform and our personal experience of working with the platform demonstrate that independent execution of tasks is an understandable and performable process for students. Therefore, using the e-learning course enables students' self-control, self-reflection, and improvement of their learning activity.

Students' answers to the completed e-learning course assignments sent to the teacher present a form of performance control.

Discussion

The conducted expert survey on the presented e-learning course for the discipline "Practical course of English" demonstrated the following opportunities of using the Moodle platform (Table 1).

Table (1): Opportunities presented by the Moodle platform as an LMS

No.	Opportunities	%*
1	allows to clearly structure and present the educational material	82.5%
2	makes e-learning tools more accessible	82.5%
3	allows creating individual educational trajectories and choosing the pace, time, and place of work during and outside the lessons	80%
4	provides the opportunity to assess students' knowledge and control their performance, save the portfolio of their works, keep a journal of students' academic achievements, and monitor their attendance and participation during classes	75%

5	assists the organization of information interaction between the subjects of the educational process	72.5%
6	allows several student groups to take the course simultaneously	72.5%
7	if needed, ensures the combination of traditional and DL in accordance with the type of an educational institution, as well as the goals, objectives, and stages of learning and the level of students' training	70%

Note: compiled based on the expert survey; * – percentage of expert mentions

The experts identified the following structural components of the Moodle platform providing the conditions necessary for the organization of DL (Table 2).

Table (2): Structural components of the Moodle platform

No.	Structural component	Conditions created by the structural component
1	Motivational	improves students' learning motivation and responsibility for the results of their independent learning
2	Program and methodical	involves informing students about the goals, objectives, structure, and content of their independent learning activity, the timing of independent work, familiarization with different learning strategies, the operational programs of disciplines, curriculum, etc.
3	Information and activity	focuses on the organization of students' independent learning during which the necessary professional competencies should be forming
4	Communicational	ensures the communication of all participants of the learning process
5	Control and assessment	involves external control and self-control of students' independent work, allows obtaining information on the intensity of every student's work and statistical data on the results of the educational activity, improves students' self-reflection, and forms their readiness to exercise self-evaluation and self-control
6	Technological	provides technical support for the organization of students' independent learning

Note: compiled based on the expert survey

E-learning courses on the Moodle platform can have various formats. However, the experts believed that the form most convenient for higher education is the so-called format structure involving the division of the course into sections (modules) that are placed between blocks and present the autonomous organizational and methodological units of the academic discipline content. The blocks also present the components of the course and can be presented by a set of links or other means of working with the course grouped by common characteristics. The content of each Moodle module can be represented by the following standard learning elements (set by default) (Table 3).

Table (3): Standard learning elements of e-learning course modules in Moodle

No.	Learning elements	The content of learning elements
1	learning resources	theoretical material added by the teacher to the course sections that can be presented in the form of files uploaded to the server of the Moodle system or links to external sites: text pages (creating a text page using various formatting), explanations (text and images displayed on the main page of the course among other resources and elements of the e-learning course, for instance, for the headings of modules and sections), web-pages, links to a file or a web-page, links to catalogs (displays the content of the whole

		catalog or its podcasts, allows students to download or view any files located there), etc.
2	activity elements	allow students' active participation: assignments (allocated by the teacher), chats (synchronous real-time messaging), forums (discussing various topics; unlike chats, forums are available for access at any time in the course of several days), glossaries (containing terms and their definitions), databases (compiling a database of structured records in accordance with a pre-set topic), wiki (collective text editing), tests of various formats (yes or no, multiple-choice, matching, short and long answer)

Note: compiled based on the expert survey

According to the experts, to ensure the effectiveness of the educational process, an e-learning course has to sequentially perform the following functions (Table 4).

Table (4): Functions of an e-learning course

No.	Opportunities	%*
1	managing students' activities in the study of the academic discipline	82.5%
2	stimulating learning activity	80%
3	rationally combining different types of learning activity and technologies of presenting educational material	77.5%
4	providing an additional motivational factor in the process of attaining knowledge, forming and developing skills, and improving one's abilities	77.5%
5	presenting information regarding the goals, objectives, structure, and contents of educational material and deadlines for various tasks	75%
6	fostering the formation of students' professional qualities	75%
7	ensuring active communication between all course participants	70%
8	executing the function of controlling personal academic achievements of each student and the group as a whole	70%

Note: compiled based on the expert survey; * – percentage of expert mentions

The experts believed that using the Moodle platform in the system of training future English teachers involves both a range of advantages and certain disadvantages (Table 5).

Table (5): Advantages and disadvantages of using the Moodle platform in the system of training future English teachers

No.	Advantages	%*
1	availability of various forms of work with students (forums, discussions, polls, in-person and distance feedback)	85%
2	“access” to the teacher without personal physical interaction with them	80%
3	filling the course with various illustrative material (ppt presentations, documents of various formats, etc.)	80%
4	quick access to other online services (YouTube, BBC, online newspapers and magazines, etc.)	75%
5	distribution and exchange of video and audio information	75%
6	grading each particular student; easy access to the platform at any time	72.5%
	Disadvantages	
1	user multitasking while browsing the Internet, distraction by other sites and open information	80%
2	inaccessibility of direct quick communication and consultations with the teacher	75%

3	lack of open illustrative information for better practical mastery of lexical and grammatical material	75%
4	lack of in-person contact reducing the opportunity for the teacher to use all the opportunities of team building and play and role-playing activities in the classroom	72.5%

Note: compiled based on the expert survey; * – percentage of expert mentions

Therefore, the conducted examination of DL technologies and the specific features of using the Moodle platform in training future English teachers allows us to make conclusions partially supported in other scientific works (Agaltsova et al., 2020; Martynova et al., 2020; Dyganova, Yavgildina, 2020; Obedkova et al., 2020). Such an organization of the educational process allows both students and teachers to easily exchange files, carry out individual communication, and receive feedback. The teacher is able to set time constraints on the performance of tasks to check their understanding. In turn, students have access to educational resources and activities presented in Moodle.

Conclusion

The results of the study support the hypothesis that the method of organizing the training of future English teachers through the means of the Moodle platform allows the formation of their English-speaking competence.

The described method is realized in the form of an e-learning course in the “format-structure” format in which the content of each module is presented by the means of Moodle learning resources and activity elements. The presented e-learning course allows teachers to create their own e-learning courses in foreign languages.

It is crucial to highlight that solely using the means of distance and mediated learning in training future English teachers is inadvisable. The study of a foreign language is impossible without the development of communication skills, working with other applicants for higher education, and, thus, without personal communication. To raise a teacher of a new generation in modern times, one must not limit the educational process to traditional forms of classroom work, especially when it comes to future English teachers who manifest themselves as intelligent, advanced creative individuals. The opportunities presented by online platforms make it possible for them to achieve the necessary level of communication skills and meet the modern requirements for philologists and teachers.

The conducted research does not claim to be the final solution to the problem under study and the obtained results indicate the advisability of further theoretical and practical research of the outlined problem. The development of basic provisions of the e-learning course “Practical course of English” for teaching listening to future English teachers creates the basis for its further practical testing and the experimental assessment of the effectiveness of its implementation.

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